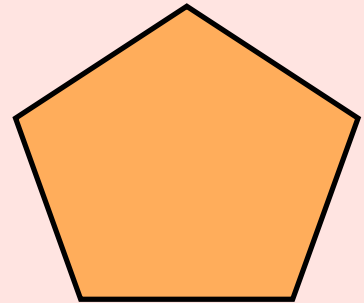
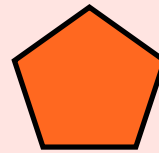
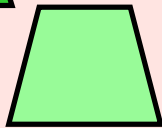
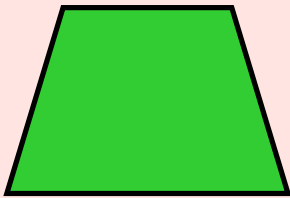
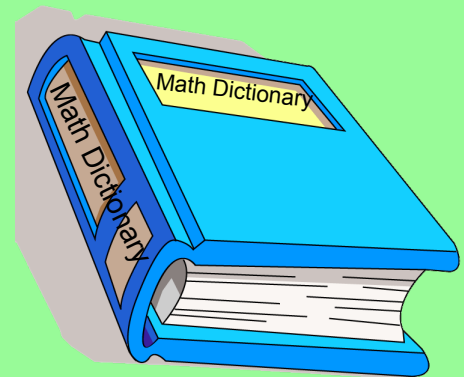


# Similar Figures Day One



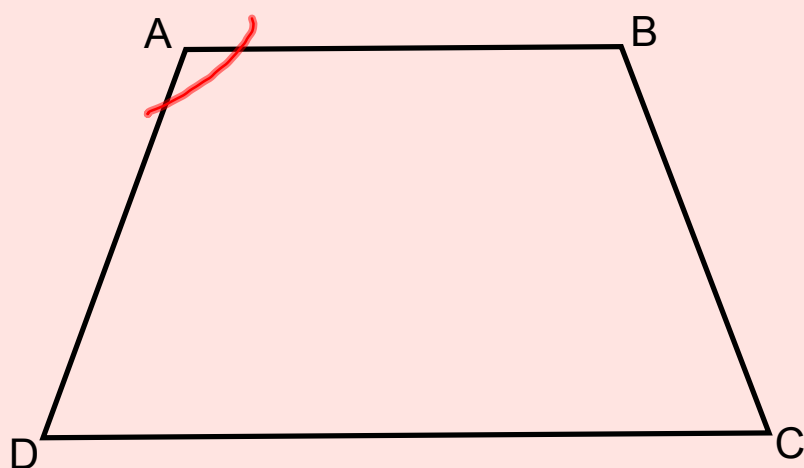
*Add to your Math Dictionary . . .*

similar - figures that are the same shape  
but not equal size.



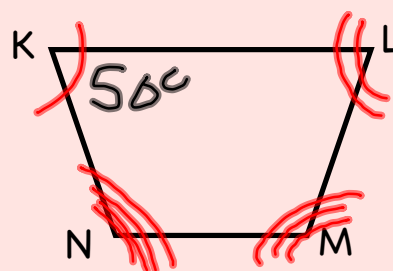
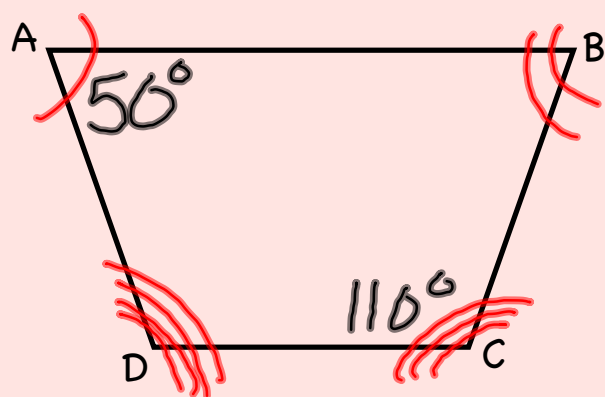
*Helpful Hint!*

## ARC MARKS!



The name of this figure is trapezoid ABCD.

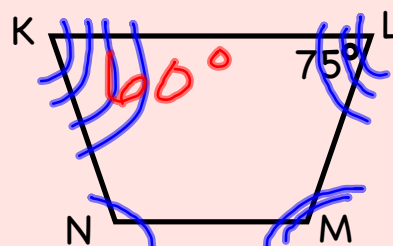
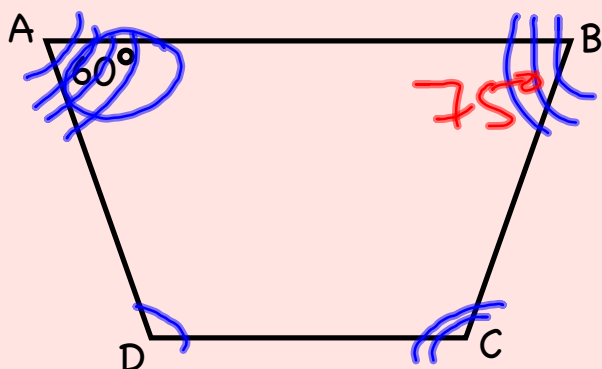
# ARC MARKS!



If two figures are similar, the

have the same measure.

# ARC MARKS!



→ "The measure of angle A"

$$\underline{m\angle A = m\angle K}$$

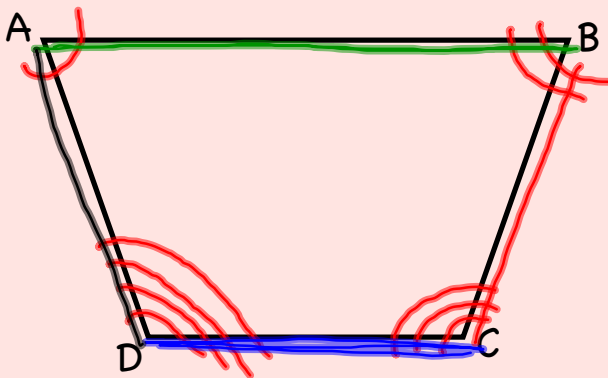
$$m\angle D = m\angle \underline{N}$$

If  $m\angle A = 60^\circ$ , then  $m\angle K = \underline{60^\circ}$

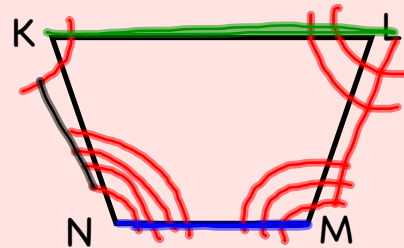
If  $m\angle L = 75^\circ$ , then  $m\angle B = \underline{75^\circ}$

# ARC MARKS!

If two figures are similar, \_\_\_\_\_  
have lengths that are in proportion to each other.

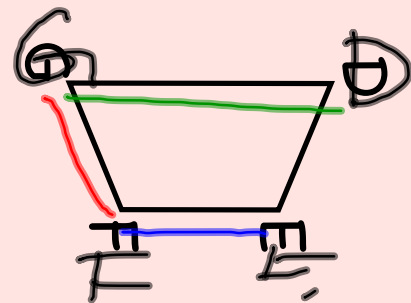
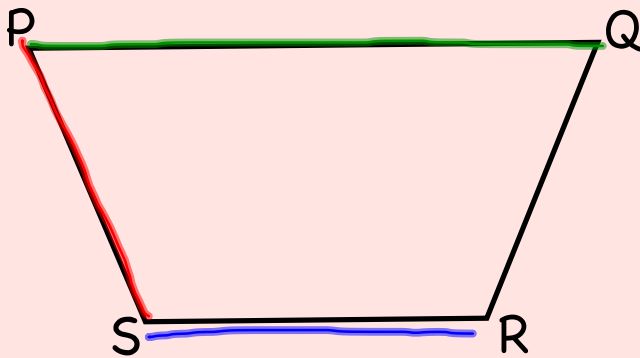


$$\frac{\text{AB}}{\text{KL}} = \frac{\text{DC}}{\text{NM}}$$



$$\frac{\text{BC}}{\text{LM}} = \frac{\text{AD}}{\text{KN}}$$

ARC  
MARKS!



$$\frac{PS}{GF} = \frac{PQ}{GE}$$

$$\frac{SR}{FE} = \frac{QR}{DE}$$

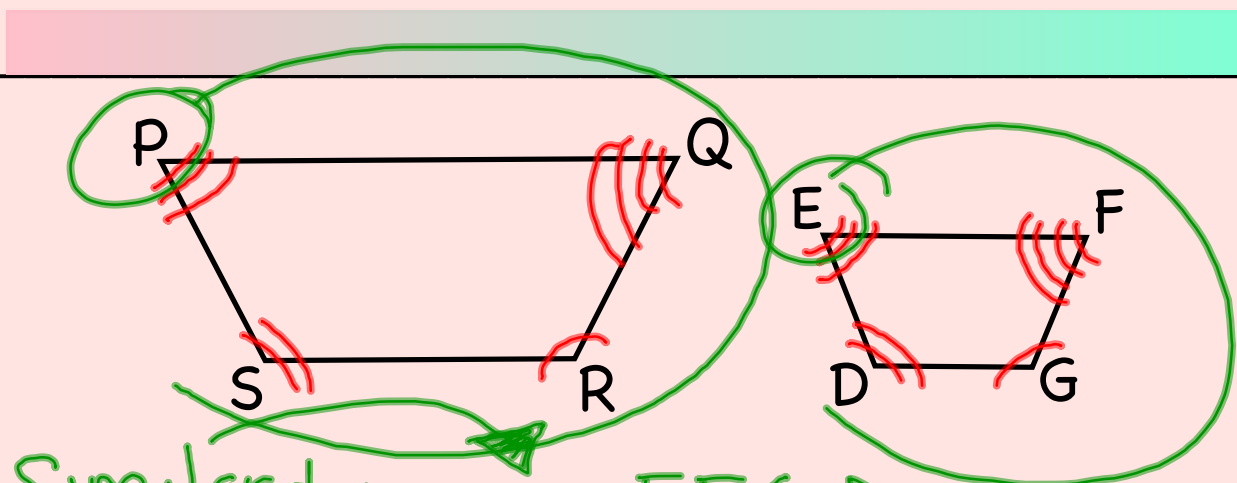
$$\begin{aligned} m\angle P &= m\angle G \\ m\angle S &= m\angle F \\ m\angle Q &= m\angle E \\ m\angle R &= m\angle D \end{aligned}$$

## Naming similar figures

**ARC  
MARKS!**

The symbol ~ means "is similar to".

\*When you name similar figures, be sure to



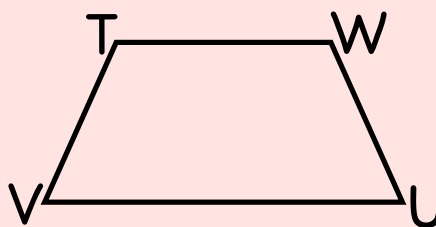
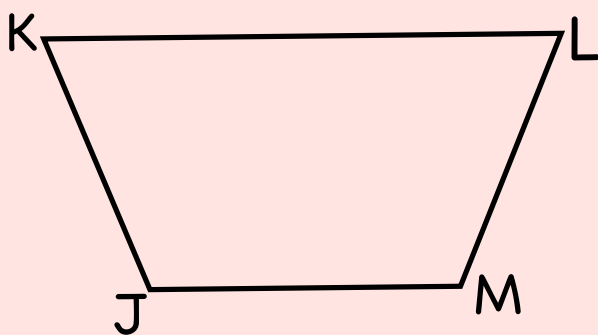
Similarity  
Statement:  $PQRS \sim \underline{EFGD}$

$PSRQ \sim EDGF$



## ARC MARKS!

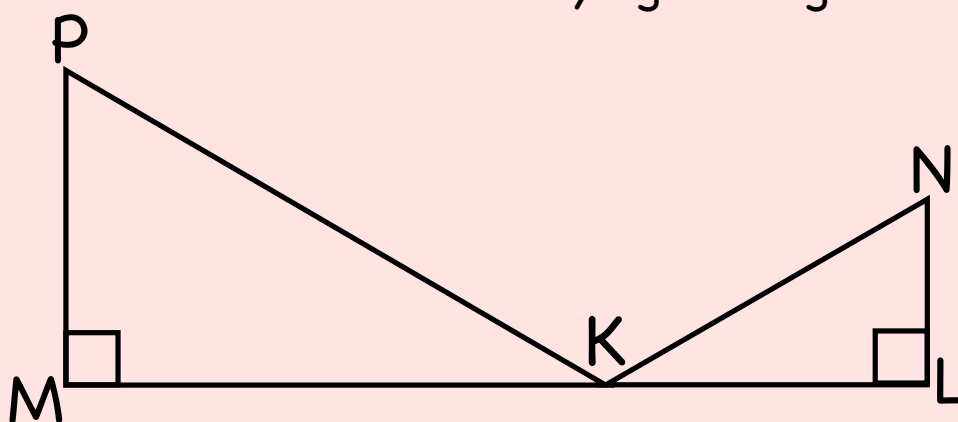
Write a mathematical statement saying the figures are similar.



---

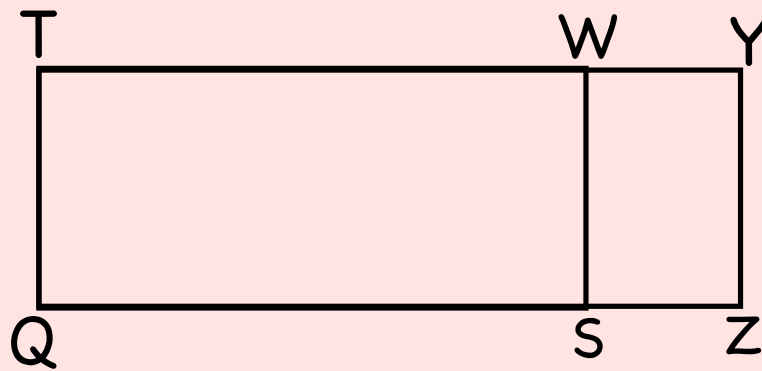
**ARC  
MARKS!**

Write a mathematical statement  
saying the figures are similar.



**ARC  
MARKS!**

Write a mathematical statement  
saying the figures are similar.



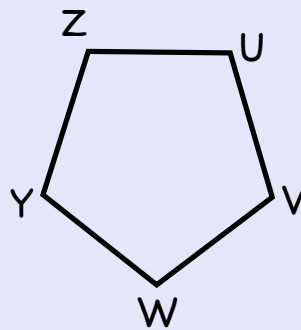
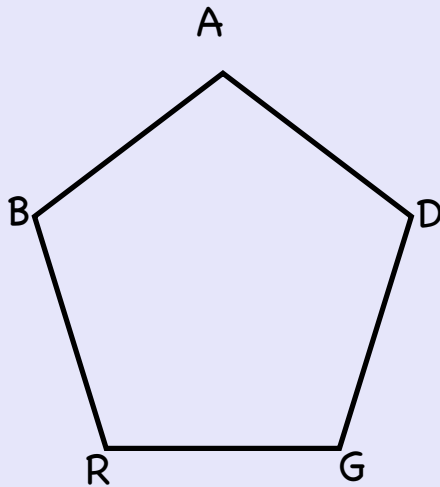
planner Time!

planner Time!

planner Time!

planner Time!

Warm Up



$$m\angle A = m\_\_\_\_\_\_?$$

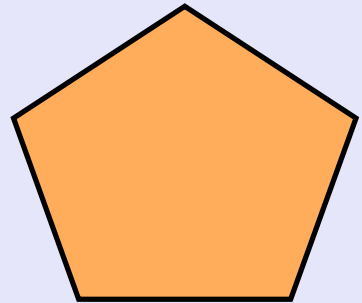
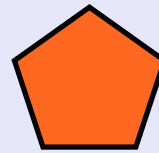
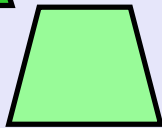
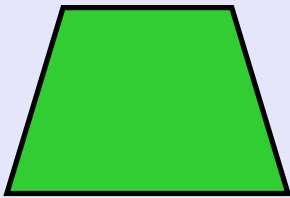
$$m\angle R = m\_\_\_\_\_\_?$$

$$\frac{BA}{?} = \frac{?}{ZU}$$

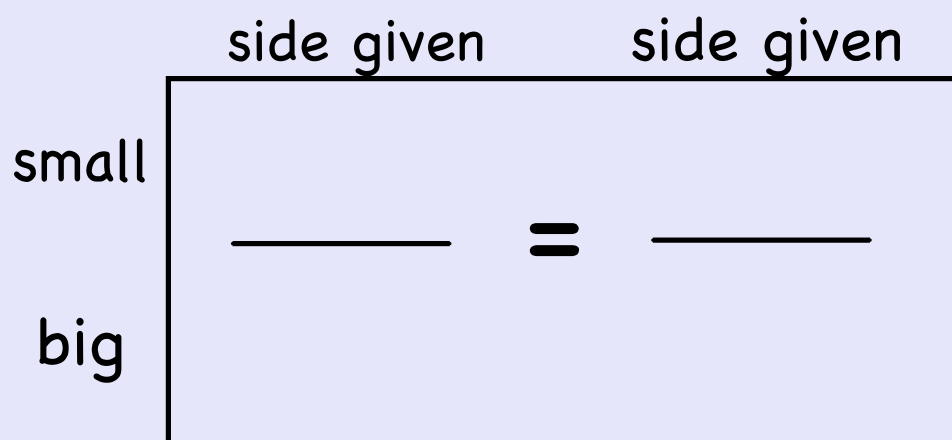
Write a mathematical statement showing these figures are similar.

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# Similar Figures Day Two

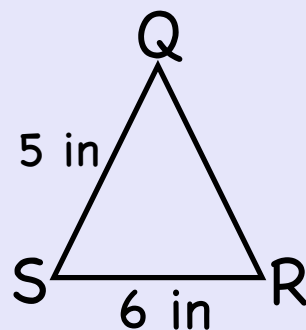
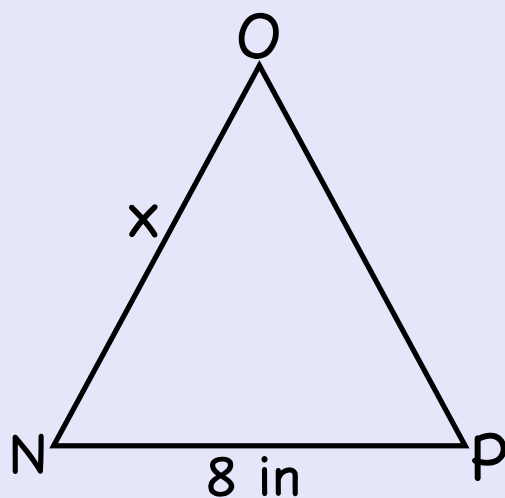


**Today we will find missing  
measurements in similar figures.**



Find the missing side length.

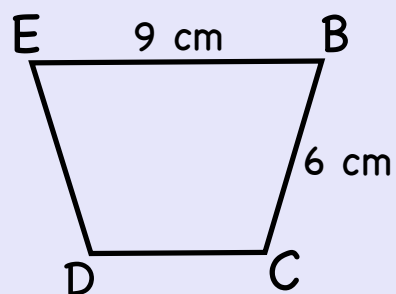
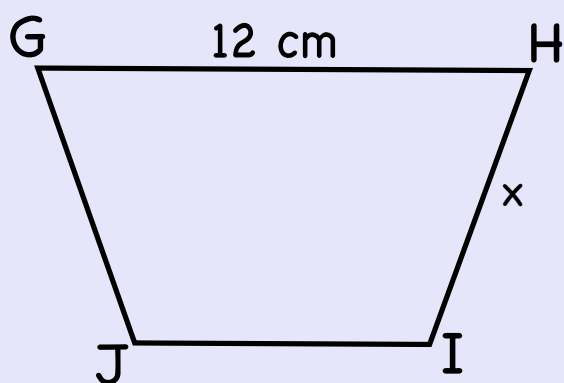
**ARC  
MARKS!**





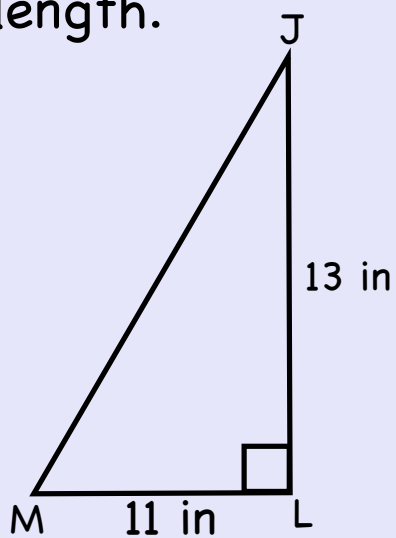
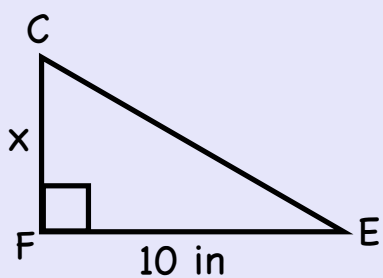
Find the missing side length.

**ARC  
MARKS!**



Find the missing side length.

**ARC  
MARKS!**



*Planner Time!*